**K-5 Math Lesson Plan**

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| **Teacher: Hafez, Richmond, Shaw, Thomas** | | | **Grade: 5** | | | **Date(s)**: September 2012 |
| **Unit Title: Operations with whole numbers and decimals.** | | | | **Corresponding Unit Task:**  **Unit 2 Task 3 – Taught Prior to Task 3** | | |
| **Essential Question(s): How can I find whole number quotients of whole numbers with up to four digit dividends and two digit divisors?** | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  **Copies of ‘Smart’ for students**  **(See below)** | | **Student:**  **Pencil**  **Math journal** | | | **Decimal**  **Decimal Point**  **Divide**  **Divisor**  **Dividend**  **Quotient** | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  √ 1. Make sense of problems and persevere in solving them.  √ 2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  √ 4. Model with mathematics.  √ 5. Use appropriate tools strategically.  √ 6. Attend to precision.  √ 7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:** 5.NBT.6 – Find whole number quotients of whole numbers with up to four digit dividends and two digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | | | | | |
| **I Can Statement(s):**  **I can show and explain division with equations, pictures, and models..** | | | | | |
| **Activating Strategy/Hook:** Teacher will read the poem ‘Smart” by Shel Silverstein. After reading the poem, students will brainstorm ideas about how this is related to dividing with decimals. | | | | | |
| **Teacher Directed:** Teacher will begin going through the poem explain how students can divide what the child swaps his dollar bill for. Begin with $1.00 and show students that when he swapped for 2 quarters, they can divide $1.00 by 2 and determine how much money he has. Do the same thing for the second stanza. Divide $1.00 by 3. Students should realize that the higher the divisor, the smaller the quotient. | | | | | |
| **Guided Practice:** Teacher will guide students to work through the last three stanzas. Students will work with the teacher to develop division equations and then solve them. Students will express these equations in a variety of ways (words, pictures, models). | | | | | |
| **Independent Practice:** Read the students the following scenario. “Your mother has given you money to buy food to donate to the Second Harvest Food Bank. You are allowed to spend $6.00 for every item. Look at the prices listed and determine how many of each item you can buy.”  **Corn - $0.50**  **Green Beans - $1.00**  **Carrots - $0.25**  **Rice - $.0.75**  **Macaroni and Cheese - $0.30**  **Ramen Noodles - $0.10** | | | | | |
| **Closing/Summarizing Strategy:** Students will create a word problem using the information they were provided in independent practice. They will then trade their problem with a peer to solve. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| Students will continue using the $6.00 budget. They will use sales papers from local supermarkets. Teacher will explain that using these prices they will have some money left over. Their task is to determine how many they can buy of products without going over the $6.00 budget. | | | Students will use manipulatives to help with division and then use a calculator to check their answers. | | | As they are working through the poem, students will use math vocabulary to explain why the character in the poem is not making good trades with his money. |
| **Assessment(s):** Informal Assessment using the closing/summarizing strategy | | | | | | |
| **Teacher Reflection:**   * Student understandings/misconceptions * Specific notes about students’ thinking * What do I need to reteach/review tomorrow or in the future * New ideas or changes for next time | | | | | | |

Smart

My dad gave me one dollar bill

‘Cause I’m his smartest son,

And I swapped it for two shiny quarters

‘Cause two is more than one!

And then I took the quarters

And traded them to Lou

For three dimes—I guess he don’t know

That three is more than two!

Just then, along came old blind Bates

And just ‘cause he can’t see

He gave me four nickels for my three dimes,

And four is more than three!

And I took the nickels to Hiram Coombs

Down at the seed-feed store,

And the fool gave me five pennies for them,

And five is more than four!

And then I went and showed my dad,

And he got red in the cheeks

And closed his eyes and shook his head---

Too proud of me to speak!

--- Shel Silverstein